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REMARKS

Claims 134 and 135 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for the reasons noted in the official action. The rejected claims are accordingly amended, by the above claim amendments, and the presently pending claims are now believed to particularly point out and distinctly claim the subject matter regarded as the invention, thereby overcoming all of the raised § 112, second paragraph, rejections. The entered claim amendments are directed solely at overcoming the raised indefiniteness rejection and are not directed at distinguishing the present invention from the art of record in this case.

Claims 127-133 and 136-197 are rejected, under 35 U.S.C. § 102(e), as being anticipated by Bamdad et al. '617. The Applicant acknowledges and respectfully traverses the raised anticipatory rejection in view of the following remarks.

The Applicant asserts that there are basic distinct differences between the present application and the teachings of Bamdad et al. '617. An important distinction of which stems from the fact that the present invention requires the presence of both a donor molecule and an acceptor molecule within the redox-active moiety. It is basic chemistry knowledge that in a donor-acceptor-complex, the donor is always different from the acceptor. If both molecules are the same, such molecules would not be able to function as both a donor and an acceptor. There is no reason for a certain kind of molecule to transfer an electron to another of the same kind of molecule.

It is respectfully submitted that Bamdad et al. '617 does not in any way explicitly, implicitly or inherently disclose, teach or suggest donor-acceptor-complexes. The ETMs of Bamdad et al. '617, bound to a certain reported component, are always ETMs of the same kind of molecule. However, Bamdad et al. '617 does not contain very much disclosure in this respect. For example, FIG. 4 shows quite clear that a number of ferrocene molecules are bound to the reporter component. Therefore, it is respectfully submitted that the ETMs in this embodiment are all the same ferrocene.

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In column 36, lines 56-57, it is mentioned that the "metal ion complex have a different redox potential than that of the ETMs used". The language "that of the ETMs" is only appropriate if all ETMs have the same potential and consequently only one kind of ETM is present.

In column 41, lines 25 to 27, Bamdad'617 discloses that "it is important that the first transport component does not contain the same ETM labels that are used in the reporter components". Obviously, a first certain kind of ETM should be used for the transport component and a second certain kind of ETM should be used for the reporter components, the first kind of ETM being different from the second kind of ETM. However, there is only one kind of ETM being bound to a certain reporter component.

In column 44, lines 39 to 46, signal amplification is described by using multiple ETMs. However, for one skilled in the art, it is respectfully submitted that it is clear that under a certain set of experimental conditions, there is a certain potential applied to the ETMs. Now, if different kinds of ETMs would be used, it is respectfully submitted that they would exhibit redox potentials differing from each other. Clearly, under a certain potential applied to the ETMs only a part of the ETMs would be oxidized. Amplification by using multiple ETMs is only possible and only makes sense if one certain kind of ETM is used. When using one kind of ETM, a certain potential applied to the ETMs would lead to oxidation of all of the ETMs and consequently to amplification.

In column 61, lines 9-10 states that "[w]ith some ETMs such as Ru²⁺(bpy)₃". Therefore, it is respectfully submitted that the plurality of ETMs is used for a number of molecules of one certain kind of ETM, in this case Ru²⁺(bpy)₃.

Further, any method for binding the ETMs to reporter components described, for example in column 51, line 49 to column 52, line 7, column 53, lines 58 to 61 or column 67, lines 22 to 42, lead to products containing only one specific kind of ETM.

Finally, the only disclosure there might even be different kinds of ETMs is believed to be found in column 52, lines 13 to 17. However, the different kinds of ETM taught here are

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used on different components for different purposes. Again, only one single kind of ETM is bound to a certain reporter component.

Taking the disclosure of Bamdad et al. '617 as a whole, the skilled artisan will learn that in any case only one specific kind of ETM is bound to the reporter components. Therefore, it is respectfully submitted that Bamdad et al. '617 neither teaches nor suggests donor-acceptor-complexes as presently recited in the presently pending claims.

Due to the fact that Bamdad et al. '617 does not mention a key feature of the present invention, i.e., does not mention donor-acceptor complexes, the Applicant's respectfully submits that the presently claimed subject-matter is novel and inventive over all of the prior art of record in this application.

In order to emphasize the above noted distinctions between the presently claimed invention and the applied art, independent claim of this application now recites the features of "A modified nucleic acid oligomer comprising . . . at least one electron-donor molecule and at least one electron-acceptor molecule . . . and at least one electron-donor molecule being different from the at least one electron-acceptor molecule.". Such features are believed to clearly and patentably distinguish the presently claimed invention from all of the art of record, including the applied art.

Next, claims 134 and 135 are rejected, under 35 U.S.C. § 103(a), as being unpatentable over Bamdad et al. '617, as applied to claims 127-133 and 136-197, in view of Haberle et al. (Laser in Forschung und Technik Vortaege des Internationalen Kongresses; 12th, Munich, June 1995: 179-184). The Applicant acknowledges and respectfully traverses the raised obviousness rejection in view of the following remarks.

The Applicant respectfully submits that while Bamdad et al. '617 may be a proper prior art citation, under 35 U.S.C. 102(e), Bamdad et al. '617 is only effective prior art, under 35 U.S.C. 103, as of its April 1, 2003 issued date which is well after the January 18, 1999 priority date of the above identified application. In view of this, the Applicant respectfully submits that the raised rejection in view of Bamdad et al. '617 and Haberle et al. be withdrawn at this time.

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Notwithstanding the above, the Applicant acknowledges that the additional reference of Haberle et al. may arguably relate to the feature indicated by the Examiner in the official action. Nevertheless, the Applicant respectfully submits that the combination of the base reference of Bamdad et al. '617 with this additional art of Haberle et al. still fails to in any way teach, suggest or disclose the above distinguishing features of the presently claimed invention. As such, all of the raised rejections should be withdrawn at this time in view of the above amendments and remarks.

If any further amendment to this application is believed necessary to advance prosecution and place this case in allowable form, the Examiner is courteously solicited to contact the undersigned representative of the Applicant to discuss the same.

In view of the above amendments and remarks, it is respectfully submitted that all of the raised rejections should be withdrawn at this time. If the Examiner disagrees with the Applicant's view concerning the withdrawal of the outstanding rejections or applicability of the Bamdad et al. '617 and/or Haberle et al. references, the Applicant respectfully requests the Examiner to indicate the specific passage or passages, or the drawing or drawings, which contain the necessary teaching, suggestion and/or disclosure required by case law. As such teaching, suggestion and/or disclosure is not present in the applied references, the raised rejection should be withdrawn at this time. Alternatively, if the Examiner is relying on his/her expertise in this field, the Applicant respectfully requests the Examiner to enter an affidavit substantiating the Examiner's position so that suitable contradictory evidence can be entered in this case by the Applicant.

In view of the foregoing, it is respectfully submitted that the raised rejection(s) should be withdrawn and this application is now placed in a condition for allowance. Action to that end, in the form of an early Notice of Allowance, is courteously solicited by the Applicant at this time.

The Applicant respectfully requests that any outstanding objection(s) or requirement(s), as to the form of this application, be held in abeyance until allowable subject matter is indicated for this case.

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In the event that there are any fee deficiencies or additional fees are payable, please charge the same or credit any overpayment to our Deposit Account (Account No. 04-0213).

Respectfully submitted,



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